

## 1) DISPLAY GRADE INPUT MARKS WILL BE GIVEN

$\leq 50$  = Fail

51 to 70 = Need to Improvement

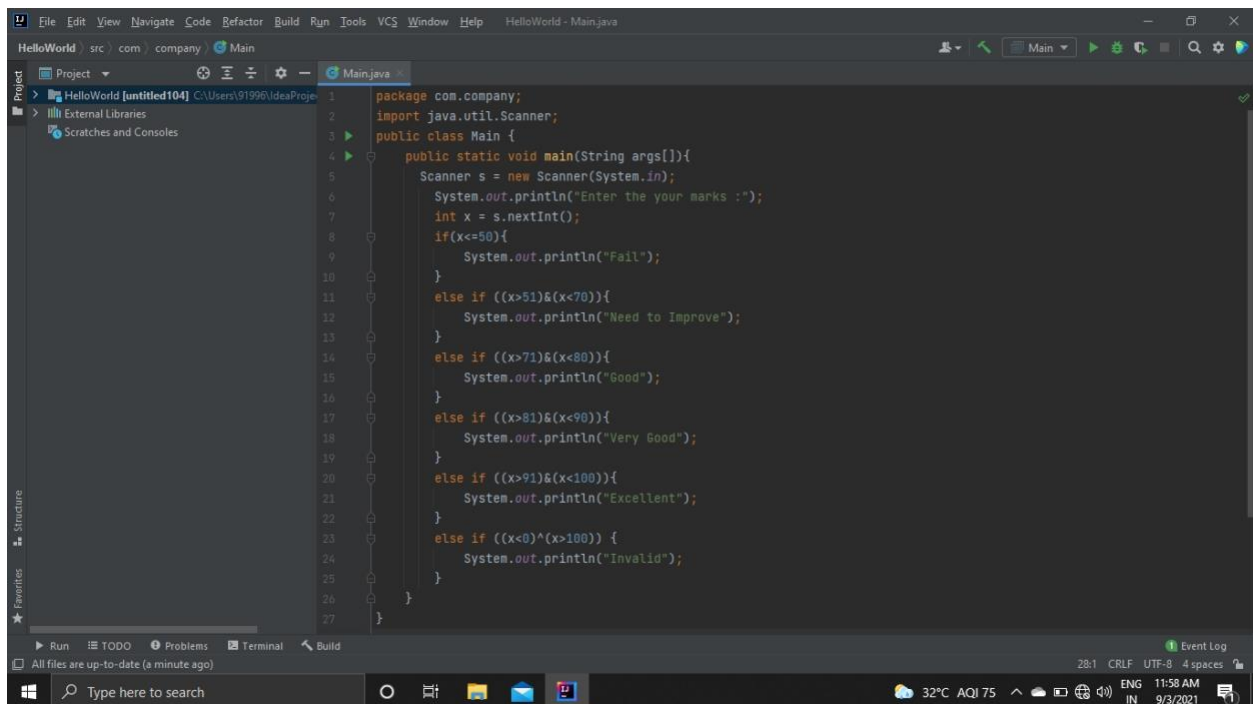
71 to 80 = Good

81 to 90 = Very Good

91 to 100 = Excellent

Less than 0 (or) Greater than 100 = Invalid

PROGRAM :

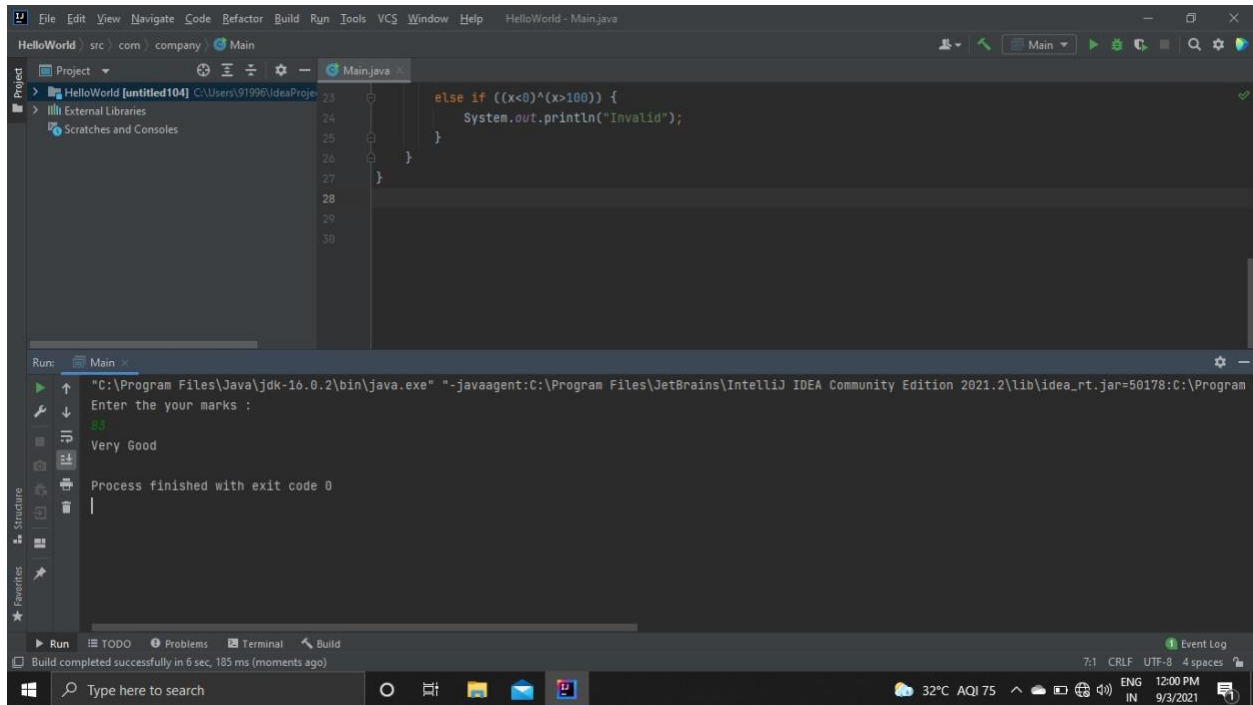


The screenshot shows an IDE window titled 'HelloWorld - Main.java'. The code is as follows:

```
1 package com.company;
2 import java.util.Scanner;
3 public class Main {
4     public static void main(String args[]){
5         Scanner s = new Scanner(System.in);
6         System.out.println("Enter the your marks :");
7         int x = s.nextInt();
8         if(x<=50){
9             System.out.println("Fail");
10        }
11        else if ((x>51)&(x<70)){
12            System.out.println("Need to Improve");
13        }
14        else if ((x>71)&(x<80)){
15            System.out.println("Good");
16        }
17        else if ((x>81)&(x<90)){
18            System.out.println("Very Good");
19        }
20        else if ((x>91)&(x<100)){
21            System.out.println("Excellent");
22        }
23        else if ((x<0)&(x>100)) {
24            System.out.println("Invalid");
25        }
26    }
27 }
```

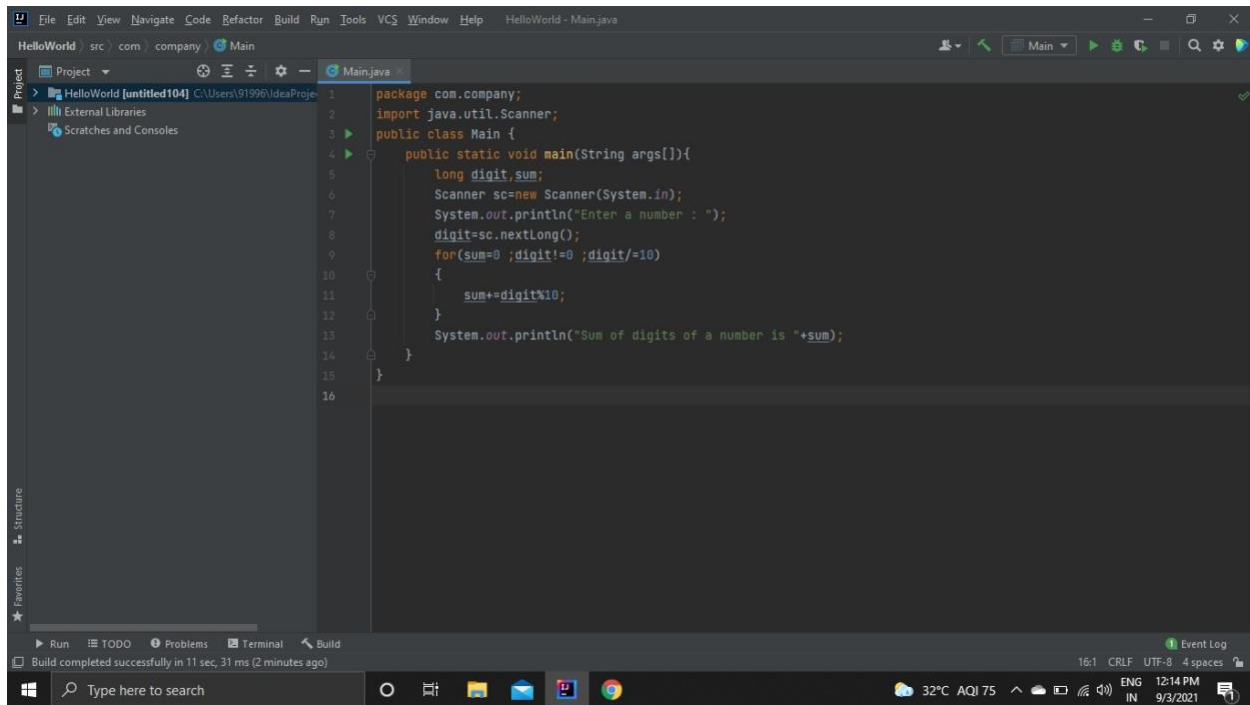
The IDE interface includes a Project view on the left, a Run/Debug toolbar at the top right, and a status bar at the bottom showing system information like temperature (32°C), AQI (75), and time (11:58 AM on 9/3/2021).

OUTPUT :



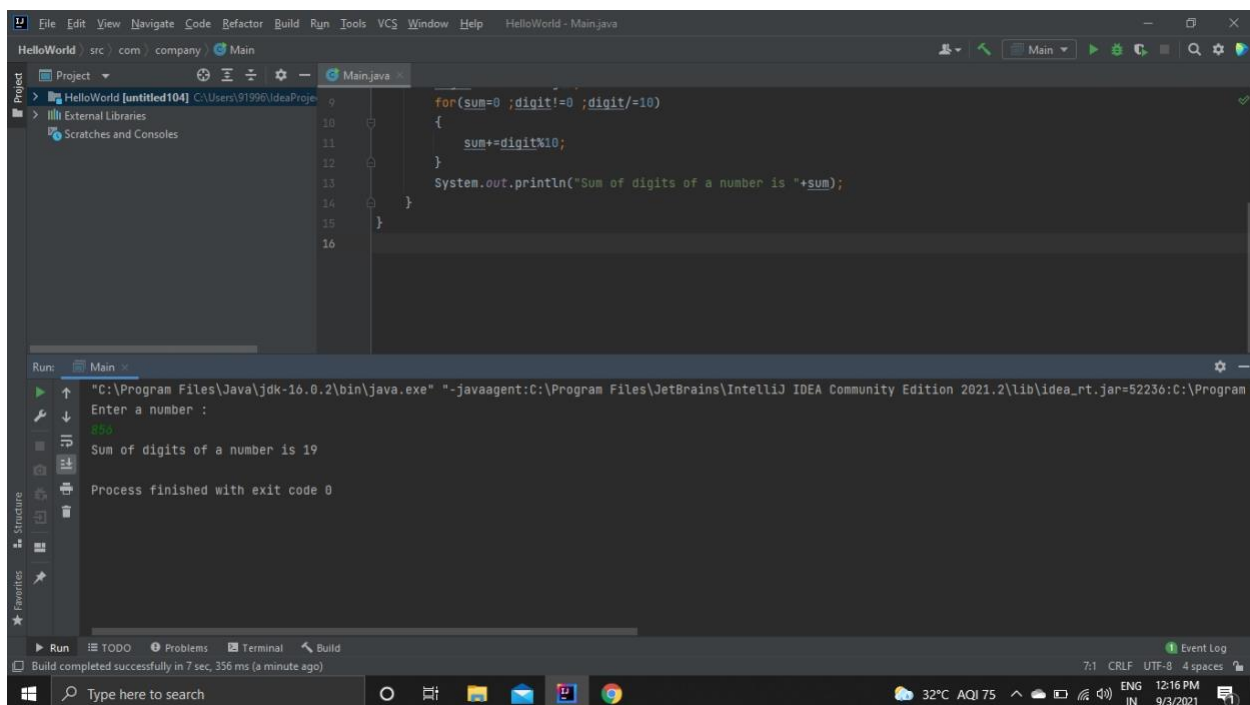
## 2) FIND THE SUM OF DIGITES OF 3 DIGITES NUMBER ?

### PROGRAM :



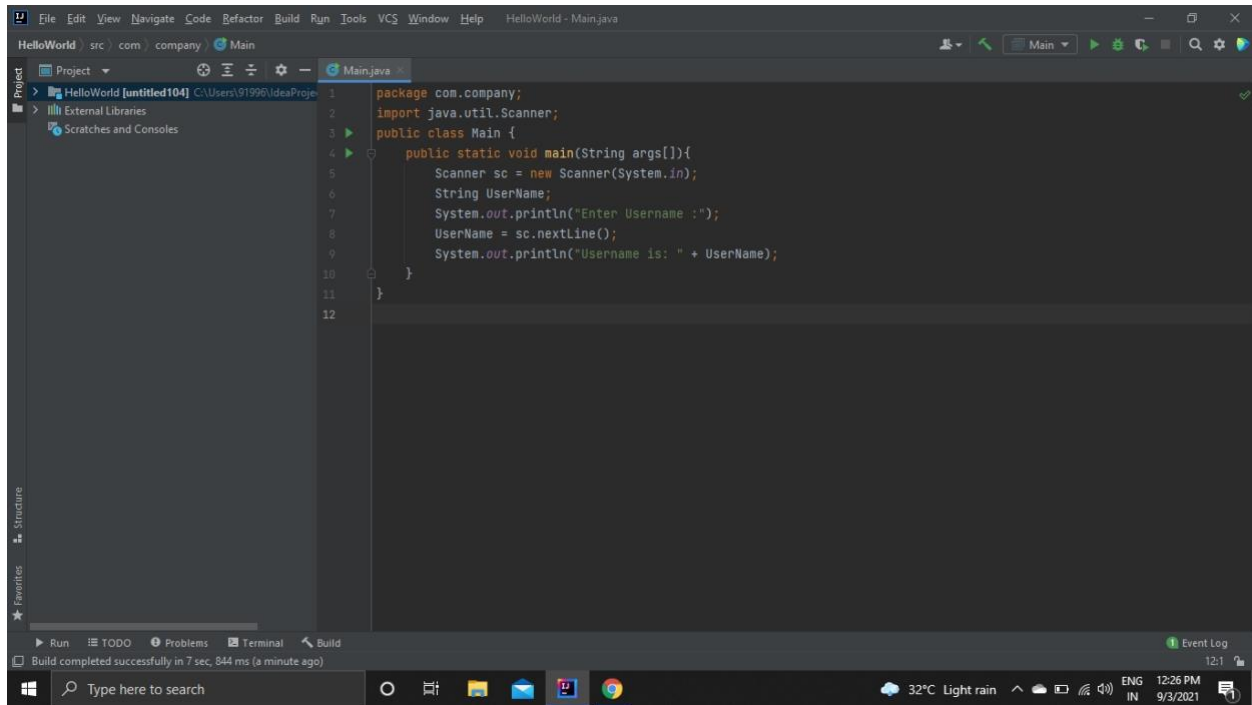
```
1 package com.company;
2 import java.util.Scanner;
3 public class Main {
4     public static void main(String args[]){
5         long digit,sum;
6         Scanner sc=new Scanner(System.in);
7         System.out.println("Enter a number : ");
8         digit=sc.nextLong();
9         for(sum=0 ;digit!=0 ;digit/=10)
10        {
11            sum+=digit%10;
12        }
13        System.out.println("Sum of digits of a number is "+sum);
14    }
15 }
16
```

### OUTPUT :



```
Run: Main
"C:\Program Files\Java\jdk-16.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.2\lib\idea_rt.jar=52236:C:\Program
Enter a number :
856
Sum of digits of a number is 19
Process finished with exit code 0
```

### 3) WRITE ANY JAVA PROGRAM TO GET INPUT FROM USING SCANNER CLASS ? PROGRAM :

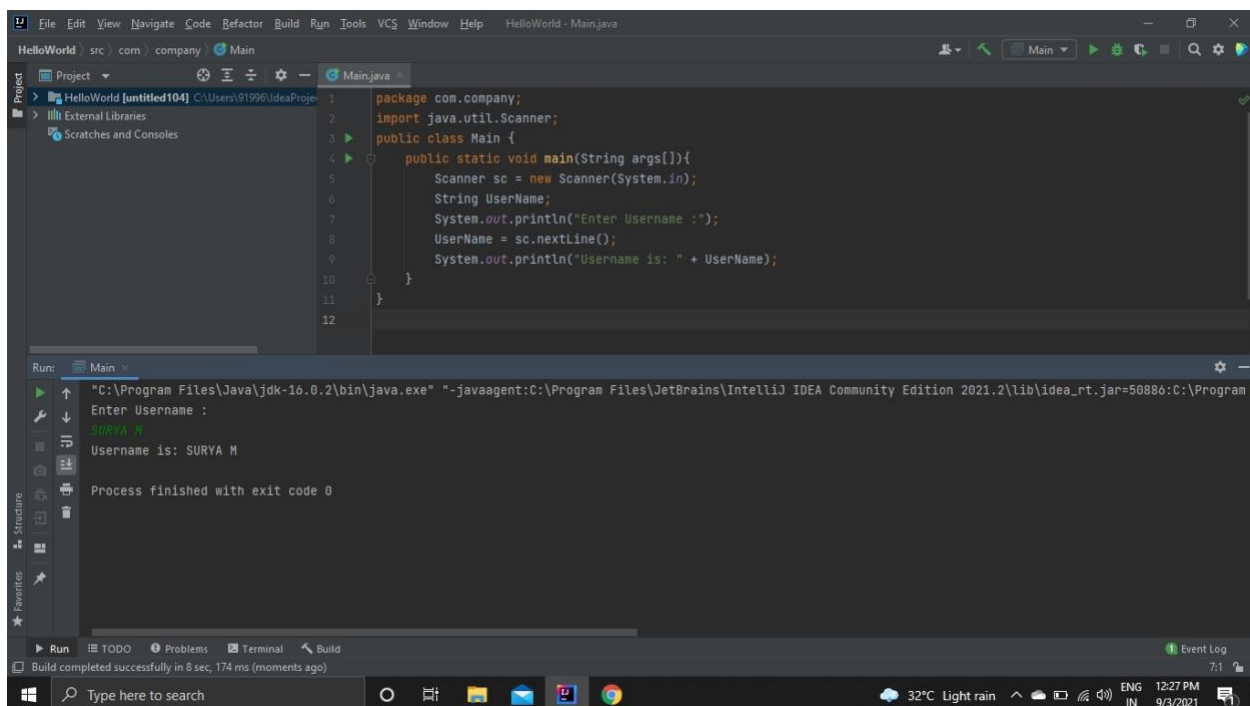


The screenshot shows an IDE window titled 'HelloWorld - Main.java'. The code is as follows:

```
1 package com.company;
2 import java.util.Scanner;
3 public class Main {
4     public static void main(String args[]){
5         Scanner sc = new Scanner(System.in);
6         String UserName;
7         System.out.println("Enter Username :");
8         UserName = sc.nextLine();
9         System.out.println("Username is: " + UserName);
10    }
11 }
12
```

The IDE interface includes a Project view on the left, a Run toolbar at the bottom, and a status bar at the very bottom showing system information like temperature and date.

### OUTPUT :



The screenshot shows the same IDE window as before, but with the Run console open at the bottom. The output is as follows:

```
Run: Main
"C:\Program Files\Java\jdk-16.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.2\lib\idea_rt.jar=50886:C:\Program
Enter Username :
SURYA M
Username is: SURYA M
Process finished with exit code 0
```

The Run console also shows the command used to execute the program and the time taken to build it.

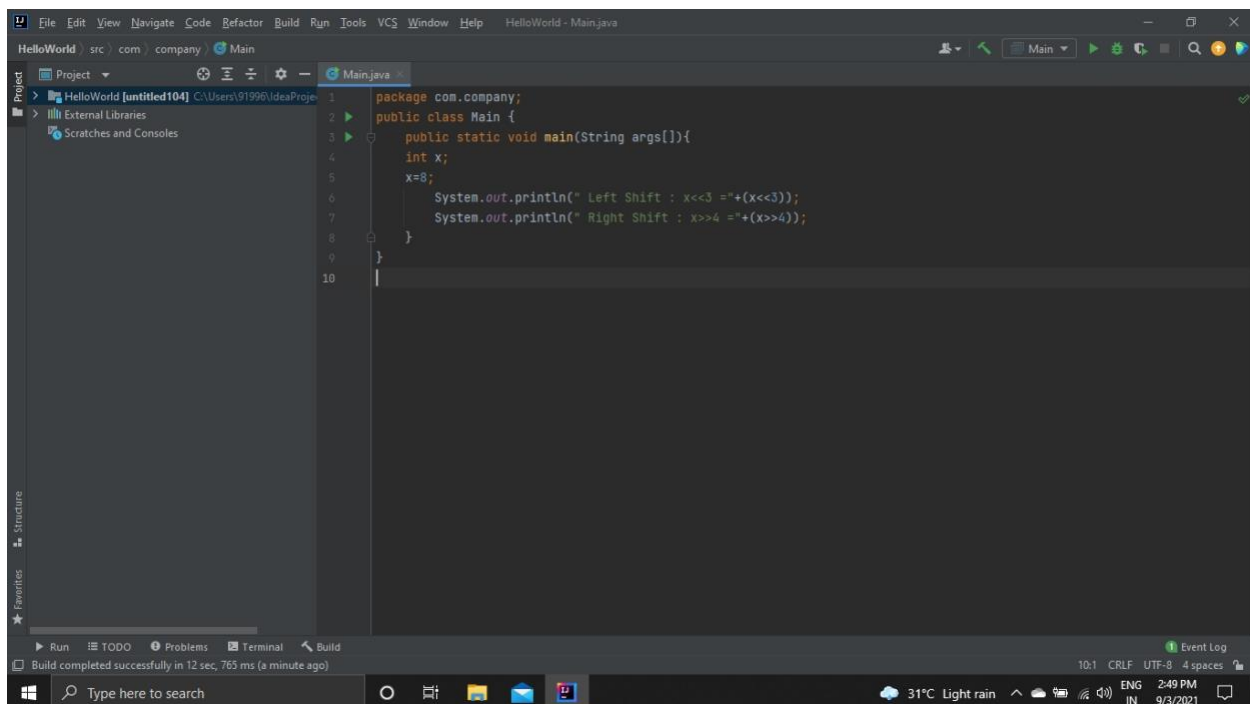
4)  $X=8$

WHAT WILL BE THE OUTPUT (LEFT SHIFT & RIGHT SHIFT)

A)  $X \ll 3$

B)  $X \gg 4$

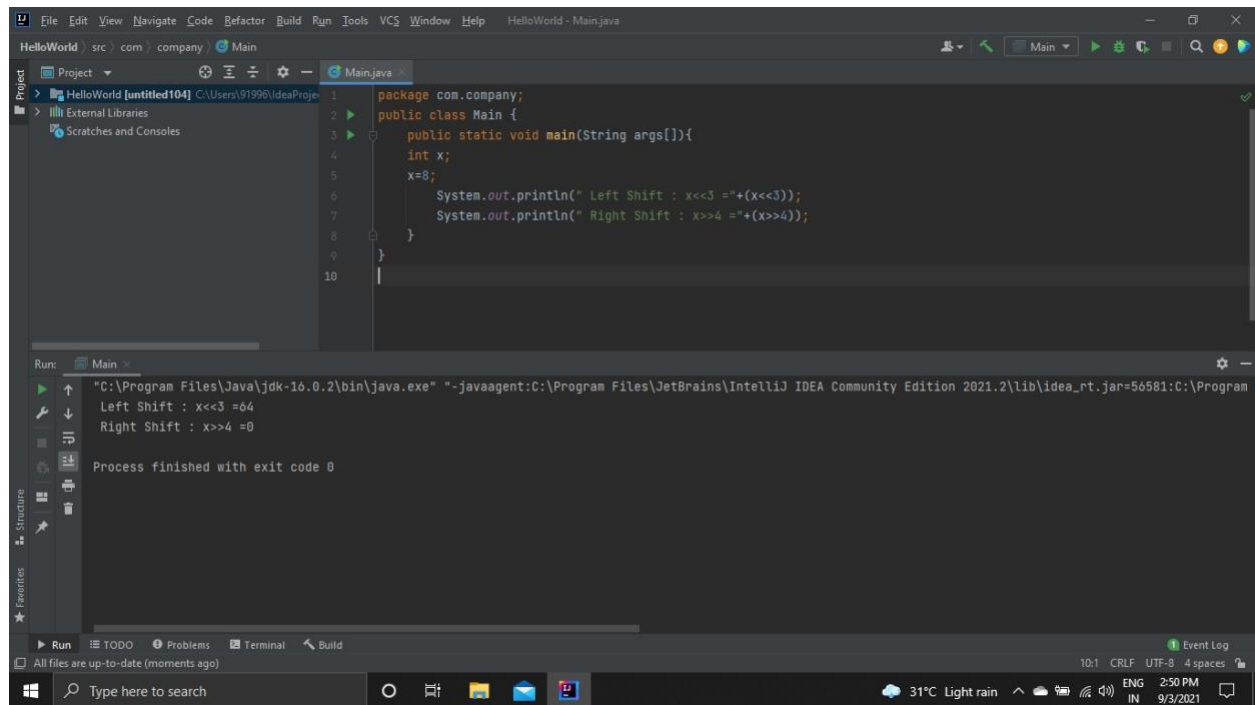
PROGRAM :



```
1 package com.company;
2 public class Main {
3     public static void main(String args[]){
4         int x;
5         x=8;
6         System.out.println(" Left Shift : x<<3 =" + (x<<3));
7         System.out.println(" Right Shift : x>>4 =" + (x>>4));
8     }
9 }
10
```

The screenshot shows an IDE window titled 'HelloWorld - Main.java'. The code defines a class 'Main' with a 'main' method. Inside the 'main' method, an integer 'x' is initialized to 8. Then, two print statements are executed: the first prints ' Left Shift : x<<3 =' followed by the result of 8 shifted left by 3 bits (which is 64), and the second prints ' Right Shift : x>>4 =' followed by the result of 8 shifted right by 4 bits (which is 0). The IDE interface includes a project explorer on the left, a toolbar at the top, and a status bar at the bottom showing 'Build completed successfully in 12 sec, 765 ms (a minute ago)'.

## OUTPUT :



The screenshot displays the IntelliJ IDEA IDE interface. The top menu bar includes File, Edit, View, Navigate, Code, Refactor, Build, Run, Tools, VCS, Window, and Help. The breadcrumb navigation shows 'HelloWorld > src > com > company > Main'. The left sidebar contains the Project view (showing 'HelloWorld [untitled104]' and 'External Libraries'), the Run view (showing 'Main'), and the Structure view. The main editor window displays the following Java code:

```
1 package com.company;
2 public class Main {
3     public static void main(String args[]){
4         int x;
5         x=8;
6         System.out.println(" Left Shift : x<<3 =" + (x<<3));
7         System.out.println(" Right Shift : x>>4 =" + (x>>4));
8     }
9 }
10
```

The Run view at the bottom shows the execution output for 'Main':

```
"C:\Program Files\Java\jdk-16.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.2\lib\idea_rt.jar=56581:C:\Program
Left Shift : x<<3 =64
Right Shift : x>>4 =0
Process finished with exit code 0
```

The status bar at the bottom indicates 'All files are up-to-date (moments ago)', '10:1 CRLF UTF-8 4 spaces', and the system tray shows '31°C Light rain', 'ENG IN', '2:50 PM', and '9/3/2021'.